

## **IN THE CLAIMS**

Kindly change the claims as shown below.

1-6 (canceled)

7. (new) A tunable laser system, comprising:

a semiconductor laser having at least three laser sections, the at least three laser sections being individually addressable with respective control currents, the at least three laser sections comprising a gain section and at least two tuning sections, the at least two tuning sections comprising at least a phase section and a first reflector section; and

a laser control unit coupled to apply respective control currents to the at least three laser sections, the current control unit storing information describing different combinations of the respective control currents, the different combinations of the respective control currents being associated with different operation points of the laser.

8. (new) The laser system as recited in claim 7, wherein the at least two tuning sections further comprise a second reflector section.

9. (new) The laser system as recited in claim 7, wherein the at least two tuning sections further comprise a coupler section.

10. (new) The laser system as recited in claim 7, wherein the laser control unit comprises a current generator unit that supplies the control currents applied to the at least two tuning sections.

11. (new) The laser system as recited in claim 7, further comprising a power detector optically coupled to receive an optical output from the laser, and wherein the

laser control unit further comprises a power regulating unit adapted to direct a current to the gain section so as to emit light at constant power.

12. (new) The laser system as recited in claim 7, further comprising a frequency-sensitive detector unit coupled to the control unit, the frequency sensitive detector unit optically coupled to receive light output from the laser and coupled to provide a frequency signal to the laser control unit, frequency signal being indicative of the frequency of the light output from the laser.

13. (new) The laser system as recited in claim 12, wherein the frequency sensitive detector unit comprises an optical filter having a frequency-dependent filter characteristic and a light detector disposed to detect an optical signal modulated by the frequency-dependent filter characteristic of the optical filter.

14. (new) The laser system as recited in claim 13, wherein the optical filter is a Fabry-Perot filter.

15. (new) The laser system as recited in claim 7, wherein the laser control unit further comprises a microprocessor that controls selection of the different combinations of the respective control currents applied to the laser.

16. (new) A method of operating a semiconductor laser having at least two tuning sections receiving individually addressable control currents, the method comprising:

storing combinations of control currents, each combination of control current being associated with a predetermined laser operating wavelength; and

applying a particular combination of control currents to the laser, the particular combination of control currents applied to the laser being associated with a desired laser operating wavelength.

17. (new) The method as recited in claim 16, further comprising detecting an optical signal from the laser indicative of power output from the laser and controlling the power output from the laser to be stable based on the detected optical signal.

18. (new) The method as recited in claim 16, wherein applying the particular control currents to the laser comprises applying a control current to at least a first reflector section and a phase section of the laser.

19. (new) The method as recited in claim 18, wherein applying the particular control currents to the laser further comprises applying a control current to at least a second reflector section of the laser.

20. (new) The method as recited in claim 18, wherein applying the particular control currents to the laser further comprises applying a control current to a coupler section of the laser.

21. (new) The method as recited in claim 16, further comprising passing light from the laser to a frequency-sensitive detector and producing a frequency signal.

22 (new) The laser system as recited in claim 12, wherein passing the light from the laser to a frequency-sensitive detector comprises passing the light to a filter having a frequency dependent filter characteristic and detecting light modulated by the filter.